

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION

JAY S. HAMMOND, GOVERNOR

POUCH 0 - JUNEAU 99811

CERTIFIED MAIL
RETURN RECEIPT
REQUESTED #0333471

Mr. P.B. Norgaard
North Alaska District Manager
ARCO Oil and Gas Company
P.O. Box 360
Anchorage, Alaska 99510

RECEIVED
MAR 02 1981
PERMITS BRANCH
EPA - REGION 10

February 23, 1981

Dear Mr. Norgaard:

The Department has reviewed Mr. W.P. Metz' January 15, 1981 request to amend Air Quality Control Permits to Operate for operation of the equipment to be actually ordered and installed at the Central Compressor Plant, Flow Station 2, the Seawater Treatment Plant and the East Seawater Injection Plant and the Radian Corporation Technical Note Air Quality Impacts in the Prudhoe Bay Oil Field Resulting from an Exchange of Emission Sources dated 3 December 1980. We have also re-evaluated the August 2, 1978 PSD Permit Application for the Construction of Additional Facilities at the Prudhoe Bay Oil Field prepared by Dames & Moore, the Radian Corporation PSD Permit Application for the Prudhoe Bay Unit Produced Water Injection, Low Pressure Separation and Artificial Lift Project and PSD Permit Application for the Prudhoe Bay Waterflood Project each dated 28 September 1979.

Based on this evaluation, the Department has determined that:

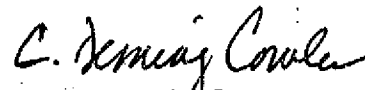
- a) The total emissions of particulate matter, sulfur dioxide, nitrogen oxides and carbon monoxide from these four facilities will be less than that analyzed in the PSD applications previously submitted and upon which the granting of Permits to Operate was previously based.
- b) Sulfur dioxide and particulate matter emissions from the turbines and heaters will not exceed the standards specified in 18 AAC 50.050, so long as natural gas is the only fuel burned.
- c) Emissions of nitrogen oxides, carbon monoxide and particulate matter will meet the requirements of previous best available control technology determinations made by the U.S. Environmental Protection Agency.
- d) The localized increases in emissions of particulate matter, sulfur dioxide, nitrogen oxides and carbon monoxide at the Seawater Treatment Plant and the East Seawater Injection Plant will not cause violations of the Alaska Ambient Air Quality Standards and increments established in 18 AAC 50.020.

Therefore, amended Permits AQC-324D, 381C, 531A, and 532A are granted for the construction, installation, and operation of the turbines and heaters at the Central Compressor Plant, Flow station 2, Seawater Treatment Plant and the East Seawater Injection Plant. Please note these permits expire January 30, 1985 and you should request renewal at least thirty days prior to that date.

The new turbines must also comply with certain federal standards promulgated in 40 CFR 60 Subpart GG on September 10, 1979. Please contact Mr. James Sweeney of the U.S. Environmental Protection Agency Alaska Operations Office in Anchorage at 271-5083, for specific requirements. These facilities must also be reviewed for compliance with the Prevention of Significant Deterioration provisions of the Clean Air Act Amendments of 1977 and regulations at 40 CFR 52.21 dated 7 August 1980. Mr. Michael M. Johnston of the U.S. Environmental Protection Agency Region X Office in Seattle, is responsible for this review.

You have a right to an adjudicatory hearing to contest the Department's action. A request for an adjudicatory hearing must be made within 30 days of receipt of this letter by mailing or delivering a statement of issues to the Alaska Department of Environmental Conservation, Pouch O, Juneau, Alaska, 99811. The statement of issues must state the basis for the hearing request and otherwise conform with AS 44.62.370. A failure to request a hearing within 30 days of receipt of this letter constitutes a waiver of your right to administrative or judicial review of this action.

Sincerely,



C. Deming Cowles
Deputy Commissioner

Enclosure: AQC-324D
AQC-381C
AQC-531A
AQC-532A

ALASKA DEPARTMENT OF ENVIRONMENTAL CONSERVATION
AIR QUALITY CONTROL
PERMIT TO OPERATE

Permit No. AQC-381C
Amends Permit No. AQC-381B

Date of Issue: *February 23, 1981*

The Department of Environmental Conservation, under authority of AS 46.03 and 18 AAC 50.400, issues an Air Quality Control Permit to Operate to

ARCO OIL AND GAS COMPANY
P.O. BOX 360
ANCHORAGE, ALASKA 99510

for the operation of the Flow Station No. 2, associated fuel burning equipment and safety flaring system, as listed in Exhibit A of this permit and described in the Atlantic Richfield Company Air Quality Control Permit to Operate application dated June 16, 1975, with attached Engineering Report, application dated December 19, 1978, PSD permit application submitted to U.S.E.P.A. August 2, 1978, ARCO Oil and Gas Company letter dated May 16, 1979, Radian Corporation "PSD Permit Application for the Prudhoe Bay Unit Produced Water Injection, Low Pressure Separation and Artificial Lift Project" dated 28 September 1979, ARCO Oil and Gas Company letter with attachments dated March 5, 1980, and Radian Corporation Technical Note "Air Quality Impacts in the Prudhoe Bay Oil Field Resulting from an Exchange of Emission Sources" dated 3 December, 1980.

Located at Section 11; T11N, R14E, (UM), Prudhoe Bay, Alaska.

Under the conditions:

1. Permittee shall comply with the State Ambient Air Quality Standards and increments established in Section 020 and the applicable emission limitations specified in Section 050 of the State Air Quality Control Regulations 18 AAC 50.
2. An Air Contaminant Emission Report, as described in Exhibit A, shall be submitted to the Department semiannually by July 30 and January 30 each year.
3. Permittee shall maintain and operate all fuel burning equipment to provide optimum fuel burning efficiency during all operating periods.
4. The Department, with permittee's approval, is allowed access to permittee's facilities to conduct scheduled or unscheduled inspections or tests to determine compliance with this permit and State environmental laws and regulations.
5. A copy of this permit shall be clearly displayed, and the State Air Quality Control Regulations 18 AAC 50 kept on file, at the permitted facility location.

This permit expires 30 January 1985 and may be suspended or revoked in accordance with 18 AAC 50.310.

C. Henry Cowles
DEPUTY COMMISSIONER
DEPARTMENT OF ENVIRONMENTAL CONSERVATION

EXHIBIT A
PERMIT TO OPERATE AQC-381C
AIR CONTAMINANT EMISSION REPORT

A notarized Air Contaminant Emission Report shall be submitted to the Department semiannually by January 30 and July 30 each year. The report shall include, but not be limited to, the following information.

NAME OF FIRM
LOCATION OF FACILITIES
PERIOD OF REPORT

1st month	2nd month	3rd month	4th month	5th month	6th month
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1. DAYS OPERATED

(number of hours or days)

2. FUEL CONSUMPTION

- a) 2 natural gas turbines
installed prior to
7 Aug 1977 totaling
24,000 HP

(total mmcf in these units)

6 natural gas heaters
installed prior to
7 Aug 1977 totaling
100 mm Btu /hr

- b) 4 natural gas turbine
installed after 7 Aug 1977
totaling 104,000 HP

(total mmcf for these units)

1 natural gas heater
installed after 7 Aug 1977
totaling 100 mm Btu/hr

- c) flaring system, modified
after 7 Aug 1977

(hours flaring and mmcf gas other than
pilot/sweep gas)

- d) emergency diesel generator

(gallons)

- 3.a Summarize and report the results of each sulfur dioxide emissions test, if performed pursuant to 40 CFR 60.333, including: date, testing method, turbine designation, fuel burning rate, fuel analysis, number of sampling points, average measured concentration and emission rate of SO₂ and O₂ and the concentration of SO₂ corrected to 15% oxygen.
- 3.b Summarize and report the results of each nitrogen oxides emissions test, if performed pursuant to 40 CFR 60.332(a), including: date and time, test method, analyzer type and serial number, ambient temperature, humidity and pressure, turbine designation, fuel burning rate, fuel analysis, number of sampling points, average measured concentration and emissions rate of NO-NO₂ and O₂ and concentration of NO_x corrected to 15% oxygen.

Permit to Operate AQC-381C Exhibit A (cont)

4. Attach a summary of any monitoring data assembled and excess emissions reports prepared if done pursuant to requirements specified in 40 CFR 60.334.
5. Report to the Regional Environmental Supervisor, Northern Regional Office, P.O. Box 1601, Fairbanks, Alaska 99707, phone (97-452-1714, open burning of flammable hydrocarbon liquids as a result of an emergency shut down (ESD) within twelve (12) hours of the incident.
6. Attach a detailed description of equipment failures or operating conditions which may have adversely affected air contaminant emissions. A preliminary report of the incident shall be submitted to the Regional Environmental Supervisor, Northern Regional Office, P.O. Box 1601, Fairbanks, Alaska 99707, phone (452-1714) within five (5) working days of the incident.

Include such information as: date of incident, duration, nature of the occurrence, equipment failures, steps taken to minimize emissions, measures taken to avoid recurrence, and a general description of the weather. A separate report is required for each incident.

7. Signature of authorized agent preceded by the statement: "I _____, being first duly sworn, hereby certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete and accurate."
8. Notarization: "Subscribed and sworn to before me this _____ day of _____ (month), _____ (year) _____ (city & state)."

Notary Public's Signature,
commission, date of expiration,
seal.

